

means for initiating fusion of said fusionable material such that said reactor core and said conducting spheres form a magnetic circuit and fusion of said fusionable materials establishes a magnetic flow around said magnetic circuit; and
means operably connected to at least one of said conducting spheres for inductively extracting electrical energy in response to said magnetic flow.

REMARKS

Claims 1-4, 7-15, 17-20, 22, 24, 26, and 28-29 are pending. By this Amendment, claims 5, 6, 16, 21, 23, 25, and 27 are canceled without prejudice.

These cancellations and additions are requested only to bring the application into conformance with Examiner's restriction requirement.

Please amend claims 2, 15, 22, 24 and 26. These amendments are made for the purpose of correcting obvious grammatical and spelling errors as well as to bring the claims into conformance with Examiner's restriction requirement. No narrowing amendments are intended.

New claim 28 has been added to claim the subject matter previously claimed in dependent claim 16. New claim 29 has been added in order to claim the subject matter previously claimed in independent claim 21. Both additions have been made to bring the application into conformance with Examiner's restriction requirement. No new matter has been added.

The Examiner imposed a restriction requirement under 35 U.S.C. § 121 indicating that the application included at least three distinct inventions. Applicant hereby elects Group I claims drawn to an apparatus without traverse.

The Examiner further required election of one of the disclosed species of reactor-conducting sphere combinations. Applicant hereby elects Group C: The embodiment as shown in Fig. 65 (2 reactors and 22 conducting spheres in an oval track) with traverse.

The Examiner further required election of one of the disclosed species of circuit. Applicant hereby elects Group E: Wherein said circuit is magnetic (see, for example, Fig. 13 and claims 3 and 4) with traverse.

The Examiner further required election of one of the disclosed species of coil arrangement. Applicant hereby elects the "at least one hemispheric coil" arrangement with traverse.

In view of the foregoing, it is submitted that this application is in condition for allowance. Favorable consideration and prompt allowance of the application are respectfully requested.

The Examiner is invited to telephone the undersigned if the Examiner believes it would be useful to advance prosecution.

Respectfully submitted,



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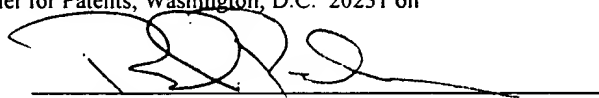
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**ATTACHMENT
REDLINED AMENDMENT**

In the Claims

Please cancel claims 5, 6, 16, 21, 23, 25 and 27 without prejudice or disclaimer.

Please substitute the following amended claims for those currently pending:

2. (Once amended) The system of claim 1 wherein fusion of said fusionable material generates a plasma that interacts with said spherical electromagnetic confinement field in a [magnethydrodynamic] magnetohydrodynamic manner.
5. (Canceled) The system of claim 1 wherein said reactor core and said conducting spheres form an electrical circuit and fusion of said fusionable materials establishes an electrical flow around said electrical circuit.
6. (Canceled) The system of claim 5 further comprising:
means operably connected to at least one of said conducting spheres for inductively extracting electrical energy in response to said electrical flow.
15. (Once amended) The system of claim 14 wherein said means for initiating said electromagnetic confinement field and said means for [extracting] extracting electrical energy comprise a coil arrangement positioned around at least one of said conducting spheres, said coil arrangement selectively operably coupled to a source of electrical energy for said means for initiating said electromagnetic confinement field and to a power grid for said means for extracting electrical energy.
16. (Canceled) The system of claim 15 wherein said coil arrangement is selected from the set consisting of: at least one hemispheric coil, at least one hemispheric coil, at least one Rowland ring coil, or any combination thereof.

21. (Canceled) A nuclear fusion reactor system comprising:
- a reactor core containing nuclear fusionable material;
 - a plurality of conducting spheres arranged adjacent each other with at least two of said conducting spheres adjacent said reactor core;
 - means for initiating fusion of said fusionable material such that said reactor core and said conducting spheres form an electro/magnetic circuit and fusion of said fusionable materials establishes an electro/magnetic flow around said electro/magnetic circuit; and
 - means operably connected to at least one of said conducting spheres for inductively extracting electrical energy in response to said electro/magnetic flow.
22. (Once amended) The system of claim [2'] 29 wherein said conducting sphere and said reactor core are arranged in an oval with said reactor core located in a middle of a straight segment of said oval and said means for inductively extracting electrical energy is located along another straight segment of said oval.
23. (Canceled) A method for the production of commercial electricity, comprising the steps of:
- generating a spherical magnetic confinement field around a fusion fuel source located in a reactor core;
 - igniting a fusion burn to convert said fusion fuel source to fusion plasma;
 - transferring energy released from said fusion burn to a proximally located conducting sphere;
 - converting energy transferred to said conducting sphere into a form capable of transfer and use through an electric power grid.
24. (Once amended) A nuclear fusion reactor system comprising:
- a reactor core containing nuclear fusionable material;
 - means for creating a spherical electromagnetic confinement field proximate said reactor core; and

means for initiating fusion of said fusionable material that generates a plasma which interacts with said spherical electromagnetic confinement field in a [magnethydrodynamic] magnetohydrodynamic manner.

25. (Canceled) A method for confining a fusion plasma burn inside a reactor core, comprising the steps of:

inducing a strong spherical electromagnetic field in at least one reactor core; and

initiating a fusion burn in the reactor core that generates a plasma which interacts with the spherical electromagnetic field in a magnethydrodynamic manner.

26. (Once amended) A nuclear fusion reactor system comprising:

a reactor core containing nuclear fusionable material;

means for creating a spherical electromagnetic confinement field proximate said reactor core; and

means for initiating fusion of said fusionable material such that said spherical electromagnetic confinement field creates a [magnethydrodynamic] magnetohydrodynamic effect within said reactor core.

27. (Canceled) A method for confining a fusion plasma burn inside a reactor core, comprising the steps of:

inducing a strong spherical electromagnetic field in at least one reactor core; and

initiating a fusion burn in the reactor core such that said spherical electromagnetic confinement field creates a magnethydrodynamic effect within said reactor core.

Please add new claims 28, and 29.

--28. The system of claim 15 wherein said coil arrangement comprises at least one hemispheric coil.

29. A nuclear fusion reactor system comprising:

a reactor core containing nuclear fusionable material;

a plurality of conducting spheres arranged adjacent each other with at least two of said conducting spheres adjacent said reactor core;

means for initiating fusion of said fusionable material such that said reactor core and said conducting spheres form a magnetic circuit and fusion of said fusionable materials establishes a magnetic flow around said magnetic circuit; and

means operably connected to at least one of said conducting spheres for inductively extracting electrical energy in response to said magnetic flow.--